
From my laptop

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I have been contemplating writing this special note for the past year. It is the best time to write, after a successful first-year run of Malaysian Journal of Ophthalmology (MyJO). MyJO has been a shared dream among many in the ophthalmology fraternity in Malaysia for years; its birth is proof of the cohesiveness of ophthalmologists in Malaysia represented by the Malaysian Society of Ophthalmology (MSO) and the College of Ophthalmologists and Malaysian Universities Conjoint Committee in Ophthalmology (MUCCO). It has been made possible with the support of Kugler Publications' dedicated team. A big THANK YOU to all!

MyJO has published a total of 4 issues with 28 interesting articles from Malaysia and abroad. The first volume of MyJO was made possible by the contribution of the authors (please keep it coming), tireless effort by the reviewers to ensure the good quality of the articles, and strong support on the part of our editorial board members. Big thank you to the enthusiastic budding ophthalmic photographers for the beautiful pictures gracing our covers: The volcano is erupting, Blooming web, The desert path, and Blue-eyed Melanau boy.

There were many roadblocks and bumps throughout our journey this past year, a learning process for many of us. I hope 2020 will bring us more success even in the midst of the COVID-19 pandemic. In this issue, we have included guidelines for ophthalmologists during the COVID-19 pandemic in Malaysia. This is a joint effort between the College of Ophthalmologists and MSO. MyJO is offering rapid publication for articles on the impact of the COVID-19 pandemic on ophthalmological practice. Let's work together to flatten the curve.

Stay safe. Stay healthy. Stay productive and innovative.

A JOINT STATEMENT BY THE COLLEGE OF OPHTHALMOLOGISTS, AMM AND THE MALAYSIAN SOCIETY OF OPHTHALMOLOGISTS

The COVID-19 pandemic has forced us as ophthalmologists to live and practice in a different and highly risky medical reality. If unchecked this pandemic has the potential to kill tens to hundreds of thousands in Malaysia and tens of millions around the world. It presents a major challenge to our brave frontline health care workers throughout Malaysia and indeed around the globe.

During these challenging times ophthalmologists will need to continue to provide urgent and emergency care to patients to prevent vision loss. This despite the risk to themselves as eye examinations and treatment need close proximity to patients putting them and their entire team at particularly high risk of contracting COVID-19.

As ophthalmologists we need to also play a role from a greater public health perspective and in the present context **three** things need to be done on an urgent basis.

First, we must reduce the risk of the COVID-19 transmission from human to human and thus reduce the rate of new case development. Only then can a “flattening of the curve” be achieved so as not to overwhelm our very limited supply of hospital beds, ICU beds, and ventilators nationwide. Our window to modify the spread of disease is a narrow and closing one.

Second, we as Malaysian ophthalmologists, must conserve desperately needed disposable medical supplies in order that they can be shared or given to the hospitals and frontline health care workers where they are needed most.

Thirdly, in order to support the above two steps, both the College of Ophthalmologists and the Malaysian Society of Ophthalmologists now very strongly recommend that it is essential that all ophthalmologists cease with immediate effect, providing any treatment other than urgent or emergency care. This includes both clinic-based and surgical care.

Urgency of care is to be decided upon by individual ophthalmologist’s judgment and must always take into account an individual patient’s medical and social circumstances. However, it must be emphasised that we have a societal

responsibility to not function as a vector of a potentially fatal disease and also to avoid a situation where our patients may also become vectors.

It is recognised that this will involve huge sacrifices from many ophthalmologists and those who work with them. We are all however facing an unprecedented threat to humankind and all other factors including business and finance become secondary to the onslaught that we face. This is a crisis that threatens our very existence. We as ophthalmologists must support our courageous colleagues who will continue working tirelessly in the days and weeks ahead. As ophthalmologists and responsible human beings our role in reducing the virus transmission and enhancing our colleague's ability to care for those desperately ill is essential.

Take care and stay safe everyone.

GUIDELINES TO OPHTHALMOLOGISTS DURING THE COVID-19 PANDEMIC

The following essential guidelines and recommendations are adapted from various online sources recognised by the College and Society to be reliable and largely applicable to us in Malaysia. However, with the spread of the pandemic, guidelines and recommendations may be subject to constant change and updates. Please keep yourself current by also accessing the international websites listed immediately below.

These are subject to the stand of the College of Ophthalmologists and the Malaysian Society of Ophthalmologists recommendation that it is essential that all ophthalmologists cease with immediate effect, providing any treatment other than urgent or emergency care.

The Royal College of Ophthalmologists, UK

Note that the RCO UK has an escalation policy as well as risk stratification in their guidelines. This divides conditions which are high risk, medium risk, and low risk according to the various subspecialties and advises on how management can be carried out in these various categories.

<https://rcophth.ac.uk/2020/03/covid-19-update-and-resources-for-ophthalmologists/>

The American Academy of Ophthalmology

<https://www.aao.org/coronavirus>

The Canadian Ophthalmological Society

<https://www.cosprc.ca/resource/guidelines-for-ophthalmic-care/>

COVID-19 AND CONJUNCTIVITIS

Several reports suggest that patients with COVID-19 infection may present to the ophthalmologist with conjunctivitis.^{1,2} This increases the possibility of the ophthalmologist to be infected by the COVID-19 virus if unprotected at the time of examination.

PREVENTING SPREAD OF COVID-19

Measures must be taken to ensure patient and staff safety during the clinic visit.

I. Screening of patients

Ophthalmologists/staff should screen patients and/or accompanying persons at the counter/entrance by asking a few basic but important questions to identify patients with possible exposure to COVID-19. There should be a distance of 1.5 to 2 meters maintained with the patient during verbal screening.

Patients should be asked the following questions:

1. Do you have fever or respiratory symptoms such as sore throat or cough and shortness of breath? (If possible, take the forehead temperature of patients.)
2. Have you or your family members travelled recently (within 14 days) especially to areas with known outbreaks (China, Iran, Italy, Spain, South Korea, United States – this list will constantly need updating. Please stay current.)
3. Have you or your members attended any mass gatherings or had any close contact with positive COVID1-19 patients?

It is recommended that the patient's temperature should also be taken at the counter if above risk factors are absent. A raised temperature should be followed by extra vigilance on the part of the staff and doctor.

Health care providers encountering at-risk patients meeting these criteria should notify and refer the patient to the nearest COVID-19 screening facility for further investigation.

II. Protecting the ophthalmologist

Ophthalmologists are advised to wear protection for the mouth, nose, and eyes when caring for patients as all patients can be potentially infected with COVID-19. The following gear is recommended:

1. Eye shield
2. Face mask
3. Slit lamp/laser shields
4. Shield for Binocular Indirect Ophthalmoscope (BIO)
5. Do not touch your face, nose or eyes
6. Wash hands with soap and water (duration of 20 secs)

II. Preventing spread of COVID-19

- O Triage all patients at a safe distance prior to registration
 - Refer to screening centre if positive.
 - Limit clinic visits to only urgent/emergency cases (see Table 1. Guidelines for triage of ophthalmology patients).

- Reduce the number of persons within the clinic at any one time
 - Limit entry to only the patient and/or one accompanying person.
 - Ensure social distancing within the clinic (at least 1.5 to 2 meters).
 - Ensure safe distance between the patients and the clinic staff - set up barriers.
 - Appointments should be spaced to avoid crowding.
- Reduce the duration of time spent with the patient on the slit lamp
 - Avoid talking on the slit lamp.
- Frequent cleaning of surfaces within the clinic and door handles
 - Provide hand sanitiser.
- Tonometer
 - The virus causing COVID-19 is an enveloped virus, unlike adenoviruses that are much more resistant to alcohol. The tonometer tip should be cleaned with alcohol and allowed to dry in room air as 70% alcohol solutions are effective at disinfecting tonometer tips from SARS-CoV-2.
 - Use single-use, disposable tonometer tips if available.
 - Avoid non-contact tonometry (air-puff tonometry). This is because virus DNA was found in patients with COVID-19-associated conjunctivitis and air-puff tonometry in such patients may produce a significant amount of virus-loaded aerosol in the local area, thus effectively spreading the virus.


@CJA_Journal | Coronavirus - #COVID19

*What we do when a COVID-19 patient needs an operation:
Operating room preparation and guidance from a frontline Singapore Hospital*

Department of Anaesthesia, National University Health System and Yong Loo Lin School of Medicine, National University of Singapore

- 🦠 **Consistent use of an isolated operating room with thorough understanding of its airflow characteristics**
- 🦠 **Transfers in full personal protective equipment (PPE) including a well-fitting N95 mask, goggles or face shield, splash-resistant gown, and boot covers**
- 🦠 **Use disposable equipment, including airway equipment whenever possible**
- 🦠 **The airway should be secured using the method with the highest chance of first-time success to avoid repeated instrumentation of the airway, including using a video-laryngoscope**
- 🦠 **Dedicated transport ventilator; to avoid aerosolization, the gas flow is turned off and the endotracheal tube clamped with forceps during switching of ventilators**
- 🦠 **Powered air-purifying respirator (PAPR) is worn for induction and reversal of anesthesia**
- 🦠 **A minimum of one hour is planned between cases to allow thorough decontamination of all surfaces, screens, keyboard, cables, monitors, and anesthesia machine**
- 🦠 **After confirmed COVID-19 cases, a hydrogen peroxide vaporizer will be used to decontaminate the OR**

Lian Kah Ti, *et al.* Can J Anesth 2020
<https://doi.org/10.1007/s12630-020-01617-4>






Table 1. Guidelines for triage of ophthalmology patients (based on the AAO guidelines)

Clinical status	Recommendation
<p>A. Routine/scheduled appointments</p>	<ul style="list-style-type: none"> • Routine problems and previously scheduled appointments should be cancelled. • New appointments should be rescheduled to a later date or once situation is back to normal. • Reorder all necessary medications.
<p>B. Urgent/emergency ophthalmology appointment: no risk of COVID-19 NO: fever, respiratory symptoms (cough, sore throat, or shortness of breath) and recent travel to high risk country/mass gathering</p>	<ul style="list-style-type: none"> • Standard precautions.* • Avoid speaking during slit-lamp biomicroscopic examinations. • Surgical mask is highly recommended for the ophthalmologist and slit lamp shield protection is highly advised
<p>C. Ophthalmic surgery</p>	<ul style="list-style-type: none"> • Elective ophthalmic cases such as cataract surgery, squint surgery, pterygium surgery, cosmetic surgery, LASIK and other non-urgent procedures should be deferred to a later date. • Urgent and emergency cases can be performed with precautions, taking into consideration the patient’s status and risk of COVID -19 infection. • Non-urgent cases in COVID-19 positive cases should not be done for any reason
<p>D. Urgent ophthalmic problem in a patient with respiratory illness symptoms NO: fever or other COVID-19 risk factors</p>	<ul style="list-style-type: none"> • The patient can be seen in the eye clinic if stable. • The patient should be asked to wear a surgical mask. • The treating ophthalmologist and health care personnel require surgical masks. • Proper gowns, gloves and eye protection are recommended (PPE: personal protective equipment) if a procedure is planned. • The examining room must be cleaned after examination.

Clinical status	Recommendation
<p>E. Any patient at high risk for COVID-19</p>	<ul style="list-style-type: none"> • The patient should be sent to the ED or other hospital-based facility equipped to evaluate for and manage COVID-19. • If the patient has an urgent eye problem, the facility should be one that is equipped to provide eye care in the hospital setting. • If COVID-19 infection is confirmed, hospital guidelines for care of suspected COVID-19 patients should be followed. • Eye care should be provided in the hospital setting. • Transmission precautions for treating ophthalmologists include complete PPE suit.
<p>F. Patient with documented COVID-19 (or person under investigation [PUI]) who is referred for evaluation and management of an eye problem</p>	<ul style="list-style-type: none"> • The patient should remain in the hospital setting and assessment to be done in the ward area if the eye problem is urgent based on history taking and symptoms • If the patient is not hospitalized at the time of referral, the patient should be referred to the ED or other hospital-based facility equipped to manage both COVID-19 and eye care. • Hospital infection prevention guidelines should be followed for care of COVID-19 patients. • Transmission precautions for treating ophthalmologists include complete PPE suit.

COVID-19 REQUIRING EMERGENCY SURGERY

Staff

- Paramedics and surgeons must be in full PPE and well-fitted N95 mask.
- Full PPE includes well-fitted N95 mask, goggles or face shield, splash resistant gown, and foot covers.
- Powered air purifying respirator (PAPR) if available or indicated.
- Ensure your staff are trained in “donning and doffing” of PPE.
- Universal precautions to be adhered to.
- Reduce the number of staff in operating room.

Facility

- Designated hospital to have a designated operating theatre to operate PUI and COVID-19 cases.

Anaesthesia

- Regional is preferred. If regional technique is chosen, the patient should wear a surgical face mask at all times.
- General anaesthesia if required, the induction and reversal should be preferably done in a negative pressure room.
- Staff participating in aerosol-generating procedures can wear PAPR equipment.

Table 2. Pros and cons of powered air purifying respirators (PAPR)

Pros	Cons
Higher protective factor than N95 respirators	No definitive evidence that PAPR reduces likelihood of viral transmission for potential airborne infections
Provides eye protection (hooded models only)	Inability to auscultate for heart and lung sounds (for hooded PAPR)
More comfortable to wear than N95 respirator	Challenges in communication
Can be used if user has facial hair (not possible with N95 respirator)	Patient apprehension (especially among pediatric patients)

Pros	Cons
Hooded models do not require fit-testing (unlike N95 respirator)	Training on use, doffing, and care of PAPR is needed to prevent contamination
Eliminates unexpected poor N95 respirator fit	Requires decontamination after use
Less likely to be dislodged when managing an agitated patient	More expensive than N95 respirator
PAPRs with hood may provide additional protection against contamination compared with typical gear worn with N95 mask	Inability to re-use disposable filters between patients (need large supply of filters)
	Need to train staff repeatedly to maintain competency if not frequently used
	Risk of battery failure and inadvertent exposure

References

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